



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/625,474  | 07/22/2003  | Hotaka Takeuchi      | 09613/000M947-US0             | 9103             |
| 7278  | 7590        | 12/23/2004           |                               |                  |
| DARBY & DARBY P.C.<br>P. O. BOX 5257<br>NEW YORK, NY 10150-5257 |             |                      | EXAMINER<br>HASAN, MOHAMMED A |                  |
|   |             |                      | ART UNIT<br>2873              | PAPER NUMBER     |

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |           |
|------------------------------|------------------------|---------------------|-----------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |           |
|                              | 10/625,474             | TAKEUCHI, HOTAKA    |           |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |           |
|                              | Mohammed Hasan         | 2873                | <i>JW</i> |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 - 18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1, 3 - 8, 10, 13, 15 is/are rejected.  
 7) Claim(s) 2, 9, 11, 12, 14, and 16 - 18 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 22 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/22/2003</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Priority***

1. Receipt of acknowledged of papers submitted under 35 U.S.C. 119 (a) – (d), which papers have placed of record in the file.

***Oath/Declaration***

2. Oath and declaration filed on 12/11/2003 is accepted.

***Information Disclosure Statement***

3. The prior art documents submitted by applicant in the Information Disclosure Statement filed on 7/22/2003 have all been considered and made of record (note the attached copy of form PTO – 1449).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2873

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1, 3 – 8, 10, 13, and 15 are rejected under 35 U.S.C. 102 (e) as being anticipated by Hagimori et al (6,728,482 B2).

Regarding claim 1, Hagimori et al discloses (refer to figure 1) a zoom lens (TL) comprising: a first lens group (Gr1) having a positive refractive power as a whole, a second lens group (Gr2) having a positive power as a whole, a third lens group (Gr3) having a positive power as a whole, arranged in order from an object side to image side, for zooming from a wide –angle end to a telephoto end as well as for correcting image surface changes required in accordance with zooming by means of moving second lens group and a third lens group from image side to object side, wherein first lens group (Gr1) consists of a lens (L1) having a negative refractive power and a prism (PR) for changing a light path arranged in order from the object side (column 3, lines 45 – 61, column 4, lines 17 – 57) .

Regarding claim 3, Hagimori et al discloses, first lens group lens has an aspherical surface (r3) (EXAMPLE 4).

Regarding claim 4, Hagimori et al discloses, an aspherical surface (r3) is formed on a surface with a smaller curvature radius (EXAMPLE 4).

Regarding claim 5, Hagimori et al discloses, an aspherical surface (r3) is formed to have a weaker negative refractive power weakening toward its periphery (EXAMPLE 4).

Regarding claim 6, Hagimori et al discloses (refer to figure 1) a third lens group (Gr3) has at least one lens with a positive refractive power and at least one lens with a negative refractive power (i.e., a doublet lens element DL1 consisting of a fourth lens element L4 of a bi-convex configuration and a fifth lens element L5 of a bi-concave configuration) (column 4, lines 32 – 35).

Regarding claim 7, Hagimori et al discloses, a third lens group (Gr3) has a lens at position closest to the object having refractive power and an aspherical surface at least on one side (r8) (see in EXAMPLE 4).

Regarding claim 8, Hagimori et al discloses, the prism (PR) of first lens group is formed to have an entrance surface and an exit surface both oblong in a direction perpendicular to a plane that includes an entrance axis and an exit axis (as shown in figure 1).

Regarding claim 10, Hagimori et al discloses, first, second and third lens group are all made of resin materials (column 2, lines 48 – 59).

Regarding claim 13, Hagimori et al discloses (refer to figure 1) a third lens group (Gr3) has at least one lens with a positive refractive power and at least one lens with a negative refractive power (i.e., a doublet lens element DL1 consisting of a fourth lens element L4 of a bi-convex configuration and a fifth lens element L5 of a bi-concave configuration) (column 4, lines 32 – 35).

Regarding claim 15, Hagimori et al discloses, the prism (PR) of first lens group (Gr1) is formed to have an entrance surface and an exit surface both oblong in a

direction perpendicular to a plane that includes an entrance axis and an exit axis (as shown in figure 1).

### ***Allowable Subject Matter***

5. Claim 2, 9, 11, 12, 14, and 16 - 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to show, a second lens group consists of a lens having a positive refractive power and an aperture stop is provided between the second lens group and third lens group and the zoom lens satisfies the following conditions  $.25 < |f_w|/|f_1| < .7$  and  $v_1 > 40$ , where f<sub>1</sub>: focal length of the first lens group, f<sub>w</sub>: focal length of the total lens system at the wide-angle end and v<sub>1</sub>: Abbe number of the first lens groups lens .

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The closest reference

Yamasita (4,059,344) discloses, a retrofocus – type objective for endoscopes.

Nishioka et al (US 2004/0070843 A1) discloses (refer to figures 68 (a) and 68 (b)) an optical system comprising in order from an object side a negative, first lens group 130, a positive, a second lens group 131, and a positive, and a third lens group 135, and a prism 136.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (571) 272-2331. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272- 2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MH  
December 18, 2004



Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800